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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,282	04/01/2004	Tilak M. Shah	4179-128	8353

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INTELLECTUAL PROPERTY / TECHNOLOGY LAW  
PO BOX 14329  
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/815,282	Applicant(s) SHAH, TILAK M.	
	Examiner Thao T. Tran	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005 and 13 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-56 is/are pending in the application.
- 4a) Of the above claim(s) 36-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-35, 41-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is in response to the Amendments filed on 12/01/2005. A preliminary Amendment filed on 10/13/2005 is also acknowledged.

2. In the Preliminary Amendment filed on 10/13/2005, claims 1-19 have been canceled. Claims 41-56 have been newly added.

3. Claims 20-56 are currently pending in this application. Claims 20, 27, 31, 36, 41, 50, 55 have been amended.

4. Claims 36-40 have been previously withdrawn as directed to a non-elected invention as indicated in the Office action of 10/13/2005.

### ***Claim Objections***

5. Claim 55 is objected to because of the following informalities: line 7, --a-- should be inserted between "between" and "sealing film". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 41-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 41 is indefinite due to the use of “(s)” in “layer(s)”. It is unclear to the examiner whether Applicants mean to indicate this as a layer or layers. Applicants are required to have the parentheses removed and write layer(s) clearly in its singular or plural form.

Claim 55 is indefinite due to the limitation "said film" in line 8. It is unclear to the examiner which film Applicants are referring to. Clarification of “said film” is required.

***Claim Rejections - 35 USC § 102***

8. In view of the Office action of 10/13/2005, the rejections of claims 1-17 as being anticipated by Michaels et al. '232, Mitchell et al. '232, Bonk et al. '025, and of claims 1-8, 10-11, 13-17 by Bryant et al. '657, are moot due to the cancellation of claims in the Preliminary Amendments filed on 10/13/2005.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 20-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant et al. (US Pat. 5,738,657).

Bryant discloses a bladder member comprising a bladder portion and a sleeve portion; wherein the bladder portion comprises a gas barrier means containing liquid and a gas generating reactive chemical means. The gas barrier means comprises a laminate of a polyurethane layer 58

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and a polyvinylidene chloride layer 56. The polyvinylidene chloride layer is 1 mil whereas the polyurethane layer is 20 mil or 10 mil (see Figs. 10-12; col. 8, ln. 41-50; col. 9, ln. 9-16).

The gas barrier means can be sealed balloon 50 containing sodium carbonate that release carbon dioxide upon contact with water (see paragraph crossing col. 4 & 5; col. 8, ln. 8-12).

Although Bryant does not teach the balloon to be generally spherical, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that shape or configuration of parts would have been an obvious design choice, depending upon user's preference and intended use, in order to bring forth maximal benefits attendant therewith.

Bryant does not teach the multilayer to be about 2-6 mil or the polyurethane layer to be about 2.0-5.0 mil thick. However, the reference teaches the polyvinylidene chloride layer to be 1 mil and the polyurethane layer to be 10 mil or 20 mil.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention as made, that the thickness of a layer would have been determined by routine optimization and would have been adjusted to a desired thickness, depending upon user's preference and intended use.

### ***Response to Arguments***

11. Applicants' arguments with respect to the 102 rejection as being anticipated by Bryant is moot since the claims are now rejected under 103.

12. Applicant's arguments filed 12/01/2005 have been fully considered but they are not persuasive.

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With respect to Applicants' arguments that the bladder of Bryant is not generally spherical, it is hereby noted that although the balloon of Bryant is not spherical, shape or configuration would have been obvious to one of ordinary skill in the art a design choice. Moreover, although not spherical, it is nevertheless bulging and part of a generally spherical flexible bag.

The same arguments are presented with respect to the thickness of the laminate.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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February 21, 2006

**THAO T. TRAN**  
**PATENT EXAMINER**